



A Cross Sectional Study To Assess The Prevalence And Adaptive Coping Behavior Of Premenstrual Syndrome(PMS) Among Adolescent Girls At Selected Nursing College Of Belagavi, Karnataka

CHANGE THE CHANGEABLE, ACCEPT THE UNCHANGEABLE AND REMOVE YOURSELF FROM THE UNACCEPTABLE

Maria Myiola Elvina Rogtao e Gonsalves

K. L.E. INSTITUTE OF NURSING SCIENCES, BELGAVI

KAHER UNIVERSITY

Shedi Dias

KLE INSTITUTE OF NURSING SCIENCES, BELGAVI
KAHER UNIVERSITY

Abstract: This study aimed to assess the prevalence of premenstrual syndrome (PMS) and adaptive coping behaviors among 150 Nursing students in Belgaum, Karnataka. A cross-sectional design was used, and data was collected using a Premenstrual Syndrome Rating Scale. The findings revealed that 71.13% of students lacked effective coping mechanisms for PMS symptoms. Common symptoms included tension, anxiety, depression, and breast tenderness. The study highlights the need for education and awareness about PMS management and relaxation techniques to improve the well-being of nursing students. The findings have implications for nursing practice, education, and research.

Keywords: Premenstrual syndrome, adaptive coping behaviors, nursing students, prevalence, symptoms, management.

INTRODUCTION

Adolescence is a transitional phase of growth and development between childhood and adulthood. In females puberty is the major physiological phenomenon where they start with menarche (menses). Menstruation is a normal and important physiological phenomenon in female's reproductive life, but major health problems faced during reproductive life are related to menstrual problems. Among them most commonly seen one is PMS.

PMS is a condition of emotional, physical, psychological and behavioral disturbances that occur after ovulation and last till menstrual flow. In India about $\frac{1}{4}$ (27.7%) of the female population falls in the age group of 15-29 years¹. According to WHO depression, loss of confidence, low self esteem and less energy

are more common among females suffering with PMS. Some degrees of premenstrual problems are experienced in the initial year of reproductive life by majority of young women.

Girls with PMS report significant impairment in personal relationship compromised work levels and increased absence from social, academic and occupational activities. PMS is one of the factors that makes women more susceptible than men to depression, particularly during periods of rapid fluctuation of gonadal hormones, such as premenstrual, postpartum and climacteric.⁷ These adolescents have poor knowledge and lack of awareness about symptoms and remedial measures during this period⁸.

The first published description of the “premenstrual tension” syndrome was by Frank. The first report on the prevalence was by Ruble (1997). It was described to occur in 15-100% of women of reproductive age, with 5-10% reporting severe symptomatology at some point in their lives with impaired social relationships and disrupted lives.

Hence this study is intended to assess the prevalence and adaptive coping behavior of nursing students

OBJECTIVES OF THE STUDY:

1. To estimate the prevalence of PMS among adolescent girls.
2. To rank the common adaptive coping measures used during PMS among adolescent girls.
3. To find out the association between prevalence of PMS among adolescent girls with their selected demographic variables.

ASSUMPTIONS:

This study assume that Premenstrual symptoms are common in adolescent girls.

HYPOTHESIS

H₁: -There will be significant association between prevalence of PMS and selected demographic variables at 0.05 level of significance.

OPERATIONAL DEFINITION:

Premenstrual syndrome:

In this study, is characterized by physical, behavioral and psychological symptoms appearing regularly during the week prior to menstruation and disappearing within a few days of its onset, causing disruption to academic, family and personal functioning.

Adolescent girls:

In this study adolescent girls would be girls aged between 18-20 years and are studying in the 1st and 2nd year B Sc N class of K.L.E College of Nursing Belagavi.

Prevalence:

Proportion of individual students in the population having symptoms of PMS.

Adaptive coping behavior

Different methods used by students to overcome or to divert from PMS symptoms

Nursing students

1st and 2nd year B Sc nursing students of age 18-20 years.

DEMOGRAPHIC VARIABLE:

Age, Age of menarche, Number of days of menstruation, Menstrual Flow, days of PMS, and Mass media,

RESEARCH VARIABLE: Prevalence of premenstrual syndrome is the dependent variable.

DELIMITATION:

This study is restricted to adolescent girls between 18-20 years.

This study is restricted to 1st & 2nd Year B Sc Nursing students of K.L.E INS Belagavi

RESEARCH METHODOLOGY

Research Approach: A quantitative research approach was selected to collect the data.

Research Design: A descriptive research design was selected.

Variables under study: In quantitative studies, concepts are usually referred to as variables which are the central building blocks of the studies.

Demographic Variables: Age, Age of menarche, Number of days of menstruation, Menstrual Flow, days of PMS, Mass media and relaxation technique.

Research variables: Prevalence of PMS.

Research settings:

Settings are the most specific places where data collection occurs based on nature of research questions and the type of information needed to address it.

The study was conducted in institute of Nursing Science KAHER, Belagavi

Population: The population is defined as “The entire set of individuals (or objects) having some common characteristics, sometime referred to as universe¹⁹.” The population for the present study was all the females Nursing students between 18-20 years of age from institute of Nursing Sciences KAHER Belagavi

Sample: The sample comprised of 1st and 2nd year females B.Sc. Nursing students of KAHER Institute of Nursing Sciences Belagavi.

Sample size and sampling techniques:

The sample size considered for the study was 150 students of 1st and 2nd year B.Sc. Nursing. Students were selected by using purposive sampling technique.

Development and description of tool: The tools were developed after review of literature on relevant topics, discussion with experts and based on the experience of the investigator. A socio demographic data, premenstrual syndrome rating scale and checklist on the common adaptive coping behavior were prepared with the help of review of literature, personal experience and discussion with experts.

Description of the final instruments

Tools 1: Socio demographic data

Tool 2: Premenstrual syndrome rating scale.

Tools 3: Check list on the common adaptive coping behavior

Literature review : Literature review from books, journals, published and unpublished studies were used to develop the tool.

Procedure for data collection: To conduct the research study in KLEU Nursing College, formal written permission was obtained from the head of the institutions after explaining the nature and objectives of the study. After obtaining the permission, for the authority. Included all female students who fall in inclusive criteria 150 students were enrolled..Confidentiality was assured to the entire subject to get their co-operation. An informed consent was taken from all the subjects individually after explaining the objectives, purpose of the study and the method of filling the questionnaire. The base line proforma and PMRS scale was administered to the students.

Plan for data analysis.

The data obtain was tabulated and analyzed by using descriptive and inferential statistics. The data will be analyzed in items of descriptive (frequency, percentage) and inferential statistics (Chi-square test).

Section I: Sample characteristics

Part A: Description of the sample characteristics.

Baseline data containing sample characteristics would be analyzed using frequency and percentage.

Part B: Estimation of prevalence rate of PMS.

Section II: Analysis of PMRS and adaptive coping behaviour.

Section III: Association between prevalence of PMS and selected demographic variables.

RESULTS

ADAPTIVE COPING BEHAVIOUR	Yes		No	
	Freq	%	freq	%
Exercise	31	20.66	119	79.33
Avoid salt before the menstrual period	16	10.66	134	89.33
Reduce caffeine intake	54	36	96	64
Reduce intake of refined sugars	37	24.66	113	75.33
Increase of fibre intake	67	44.66	83	55.33
Adequate rest and sleep	124	82.66	26	17.33
Uses any vitamin supplements	39	26	111	74
Uses Analgesics	30	20	120	80
Uses hormonal pills (Oral contraceptives)	6	4	144	96
Uses any other remedies mention:	29	19.33	121	80.66

- Majority of students 64(42.66%) were belonging to age of 19 years and minimum number of students 32(21.3%) were 18years.
- Majority of students 108(72%) attained menarche in the age group of 13-15 yrs and minimum number of students 7 (4.66%) attained menarche after 16 yrs.
- Majority of students 62(41.33%) have 4-5 days of menstrual bleeding and minimum number 09 (6%) have more than 6 days.
- Majority of the students have moderate menstrual flow-105 (70%) and minimum students 17(11.33%) have heavy flow.
- In 59(39.33%) students PMS lasts for 2-3 days and in 5(3.33%) it lasts for more than 6 days.
- Majority of students 85(56.66%) used television as mass media at home while minimum number 05(3.33%) used newspaper.
- Majority of students 79(52.66%) do not perform relaxation techniques while 71(47.33%) did.

CONCLUSION: The primary aim of the present study was to assess the rate of prevalence of premenstrual syndrome (PMS) and adaptive coping behaviour among 1st and 2nd year B. Sc. Nursing students of K.L.E.U INS at Belgaum Karnataka. A non-experimental descriptive design, with descriptive approach was used for the present study. The data was collected from the 150 samples through non-probability convenient sampling technique using a PMS scale. The conclusion drawn on the basis of the findings of the study includes:

The data indicates that among emotional & behavioral symptoms, tension & anxiety are the most common 77(51.33%), depression & oversensitivity is next with both 64(42.66%) and anger & irritability 55(36.66%). Among physical symptoms the most common were breast tenderness 55(36.66%), headache 55(36.66%), abdominal bloating 54(36%) and joint & muscles pain 41(27.33%).

Majority (71.13%) did not have any coping mechanisms for their symptoms, while the rest of the respondents reported taking rest, chatting with friends, listening to music and also exercises, yoga, meditation and medications. Rest (82.66%) was the most common coping mechanism for the somatic symptoms followed by reduces caffeine intake (36%), exercise (20.66%) and analgesic (20%).

Majority 33.53% of the subjects were experiencing mild premenstrual symptoms, 20.4% were experiencing moderate premenstrual symptoms, 7.3 % were experiencing severe premenstrual symptoms.

The findings reveal that there is no association between prevalence of PMS and selected demographic variables.

NURSING IMPLICATION

NURSING EDUCATION:

Findings of the study can be used by the nurse educator to educate the nurse regarding knowledge. The modified nursing knowledge used in the study should be employed to help refine their knowledge on the topic. The checklist can be used to teach students about various factors of knowledge and may be used in the nursing curriculum.

NURSING RESEARCH: The present study findings could be presented in International, National and State level conferences and help the entire nurse to be aware of the findings which will help them to strengthen their nursing research in nursing.

LIMITATIONS OF THE STUDY:

1. The data was collected from 150 samples to find out the specific prevalence rate, it could be done on more samples for the larger generalization.
2. The study is limited only to B. Sc. Nursing students from the selected nursing college of Belagavi.

RECOMMENDATION:

1. A comparative study can be conducted between married and unmarried Women.
2. A SIM can be developed based on the learning needs of the women regarding PMS and its management.
3. Intervention study can be undertaken to know the effect of various treatment strategies in reducing premenstrual syndrome.
4. A similar study on large and wider sample for a longer period would be more pertinent in making board generalization.

REFERENCES

- 1) [https://www.researchgate.net/publication/289005155The worldwide prevalence of premenstrual syndrome A systematic review and meta-analysis study](https://www.researchgate.net/publication/289005155The_worldwide_prevalence_of_premenstrual_syndrome_A_systematic_review_and_meta-analysis_study) [accessed May 17 2018]
- 2) Brahmbhatt S, Sattigeri BM, Shah H, Kumar A, Devang P. International Journal of Research in Medical Sciences ;2013 May;1(2):69-72.
- 3) Magfirah: Dating Violence and Premenstrual Syndrome among adolescent girl in Senior High Schools of Purworejo District. Matern Child Health-Reprod Health Study ProgramPublic Health Science. 2011, 1-6.
- 4) FikruWakjira Tolossa1 and MebratuLegesseBekele:Prevalence, impacts and medical managements of premenstrual syndrome among female students: Women's Health 2014, 14:52 <http://www.biomedcentral.com/1472-6874/14/52>
- 5) cSivagurunathan, R Umadevi, and S GopalakrishnanAdolescent Health: Preasent status and its related programmes in India. Are we in the same direction? Journal of Clinical and Diagnostic Research: JCDR
- 6) DeMonico SO, Brown CS, Ling FW: Premenstrual syndrome. CurrOpinObstet Gynecol. 1994, 6: 499-502.
- 7) Choi DS: Premenstrual syndrome. J Women Med. 2009, 2 (4): 141-146. Mak K. Y, Kitty K, C, Chan. Premenstrual tension in a psychiatric patient population in Hong Kong. Journal of Hong Kong coll Gen Pract. 1985 [cited 2005 November 15]; 7:1449-55. <http://www.cuhk.edu.hk/rtao/research/rpp9798/medicine.pdf>
- 8) Tenkir A, Fisseha N, Ayele B. Premenstrual syndrome: prevalence and effect on academic and social performances of students in Jimma university, Ethiopia African Journal of Health Development 2002; 17 (3): 181-88.
- 9) Ms. P. Padmavathi, Dr. Raja Sankar, Dr. N. Kokilavani: Prevalence of Premenstrual Syndrome among Adolescent Girls at ErodeISSN 2231-1149 <http://www.anvpublication.org/ajner.htm>
- 10) SV Kamat, AS Nimbalkar, SM Nimbalkar. Premenstrual syndrome in adolescents of anand (PSST-A)doi:10.1136/archdischild-2012-302724.0465 *Charutar Arogya Mandal, Anand, India*
- 11) IOSRJournal of Nursing and Health Science (IOSR-JNHS) e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 5, Issue 1 Ver. I (Jan. - Feb. 2016), PP 24-27 www.iosrjournals.org DOI: 10.9790/1959-05112427 www.iosrjournals.org 24
- 12) Mr. Tibin Joseph, Prof. Nandini M, Ms. Sabira K. A, Prevalence of Premenstrual Syndrome (PMS) Among Adolescent Girls ,*Aswini College of Nursing, Thrissur*
- 13) FikruWakjira Tolossa1 and MebratuLegesseBekele:Prevalence, impacts and medical managements of premenstrual syndrome among female students: Women's Health 2014, 14:52 <http://www.biomedcentral.com/1472-6874/14/52>
- 14) Ranjana Mandal, Dr Aditya Prasad Sarkar, premenstrual syndrome among adolescent girl students in an urban area of West Bengal January 2015 with 604 ReadsDOI: 10.18203/2320-1770.ijrcog20150417